

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/008,259	10/29/2001	Tucker L. Smith	9696	2587	
JAMES M. STOVER, ESQ. NCR CORPORATION LAW DEPARTMENT, WHQ-4			EXAM	EXAMINER	
			LASTRA,	LASTRA, DANIEL	
DAYTON,, OF	ERSON BOULEVARD I 45479	)	ART UNIT PAPER NUMBER		
,			3622		
			MAIL DATE	DELIVERY MODE	
			01/09/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		I A N	A				
•		Application No.	Applicant(s)				
Office Action Commence		10/008,259	SMITH ET AL.				
	Office Action Summary	Examiner	Art Unit				
<u></u>		DANIEL LASTRA	3622				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on <u>22 October 2007</u> .						
,—	2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
5) <u>□</u> 6)⊠	<ul> <li>4)  Claim(s) 1-24 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-24 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> </ul>						
8)	8) Claim(s) are subject to restriction and/or election requirement.						
• •	ion Papers						
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	epted or b) objected to by the liderawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority ι	under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
2) Notic	et(s)  be of References Cited (PTO-892)  be of Draftsperson's Patent Drawing Review (PTO-948)  mation Disclosure Statement(s) (PTO/SB/08)	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F	ate				
· —	r No(s)/Mail Date	6) Other:	•				

### **DETAILED ACTION**

1. Claims 1-24 have been examined. Application 10/008,259 (SYSTEM AND METHOD FOR PROFILING DIFFERENT USERS HAVING A COMMON COMPUTER IDENTIFIER) has a filing date 10/29/2001.

## **Response to Amendment**

2. In response to Non Final Rejection filed 07/17/2007, the Applicant filed an Amendment on 10/22/2007, which amended claim 7.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 13 recite "generating a user identifier key from the key data and generating a user profile history from the extracted profile data in response to the key data corresponding to a key stored in the memory and the extracted profile data failing to correlate to the user profile history stored in the memory in association with the key stored in the memory; storing the generated user identifier key in the memory; and storing the generated user profile history in the memory in association with the generated user identifier key and the key to which the key data corresponded so the generated user profile history is associated with a user that is different than a user associated with the user profile history stored in association with

10/008,259 Art Unit: 3622

the key stored in memory to which the key data corresponded. Said limitation is indefinite because it is not clear how the generated user identifier key indicates that the generated user profile history is associated with a user that is different from a user associated with the key stored in the memory. For purpose of art rejection, said limitation would be interpreted as simply storing in memory a user profile using a key identifier, comparing said stored profile with a generated profile by comparing said stored profile with the generated profile and if there is a correlation between said profiles, merging said profiles but if there is no correlation between said profiles then generating a new profile with a new identifier.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by <u>Blasko</u> (US 2001/0049620).

As per claim 13, <u>Blasko</u> teaches:

A method for profiling different users having a common terminal identifier comprising:

storing user profile histories in a memory, each user profile history being stored in the memory (see paragraph 53) in association with a key (see paragraph 19 "transaction identifier of the server generating the profile vector that in television environment may be the MAC ID for the Set top box").

receiving the user activity data at a server from clients over a computer network (see paragraph 87 "profile vector from web browsing activities of the user or frequency of channel changes");

receiving user activity data from the server (see paragraph 53);

extracting profile data from the user activity data (see paragraph 96);

searching the user activity data for key data that identifies one of a user terminal and a user account (see paragraphs 133, 113 "random ID or MAC-ID"; paragraph 116 "profile vectors may be tracked by virtual identifiers such as a random ID and this ID may act as a profile vector identifier");

determining whether the key data located in the user activity data corresponds to a key stored in the memory (see paragraphs 130-131 "evaluator may use one or more pieces of deterministic information identifying user's identity. For example, the profile vector may include the MAC ID of the transmitting Set top box. The evaluator communicates to a secure correlation server for correlating the user identification with the previously stored profile vector information");

10/008,259 Art Unit: 3622

generating a user identifier key (i.e. "profile ID") from the key data and generating a user profile history (i.e. "profile vector") from the extracted profile data in response to the key data (i.e. "transaction ID") corresponding to a key stored in the memory and the extracted profile data failing to correlate to the user profile history stored in the memory in association with the key stored in the memory (see paragraph 130 "correlation server for correlating the user identification with the previously stored profile vector information"); storing the generated user identifier key in the memory (see paragraph 53 "profile ID"); and storing the generated user profile history in the memory in association with the generated user identifier key and the key to which the key data corresponded so the generated user profile history is associated with a user that is different than a user associated with the user profile history stored in association with the key stored in memory to which the key data corresponded but both the generated user profile history and the user profile history stored in the memory are associated with the key that corresponded to the key data (see paragraph 107). Blasko teaches that each transaction (television viewing over predetermined period) is recognized by a profile ID (i.e. generated user identifier key; see paragraph 21) and the MAC-ID (i.e. key or identifier of the server generating the profile vector; see paragraph 20) of the set top box. The current profile vector generated with the profile ID is compared with previously stored profile vector to select suitable advertisements using collaborative filtering techniques (see paragraph 21) and based on the identifying attributes in the profile lds (i.e. transaction ID, transaction level, profiling content' see figure 3, paragraph 72), sets of profiles are linked or correlated (see paragraph 66). Therefore, Blasko correlates the profile ID attributes from generated profile vector to stored archive profile vector and when there is a correlation, <u>Blasko</u> merge the generated profile vector with the stored profile vector but when there is no correlation, <u>Blasko</u> generates new profile vector.

As per claim 14, Blasko teaches:

wherein the profile data is extracted from session data (see paragraph 96).

As per claim 15, Blasko teaches:

wherein the profile data is extracted from browse period data (see paragraphs 96 and 117).

As per claim 16, <u>Blasko</u> teaches:

the determination that the key data corresponds to a key stored in the memory includes: comparing a site identifier (i.e. URL accesses; paragraph 97) and a resource identifier (i.e. identifier for the server generating the profile vector where in television would be the MAC ID for the STB; see paragraph 20; "cookies" see paragraph 97) in the extracted profile data with the site identifiers and resource identifiers in user profile histories stored in the memory (see paragraphs 67 and 72). In <u>Blasko</u>, based on the identifying attributes in the profile ID (i.e. transaction ID, such as MAC ID (i.e. resource identifiers), profiling content such as URL access (i.e. site identifier) sets of profiles are linked or correlated (see paragraph 66).

As per claim 17, Blasko teaches:

the comparison of the site identifier and the resource identifier in the extracted profile data to site identifiers and resource identifiers in user profile histories further comprising:

detecting a low level of correspondence between the site identifier and the resource identifier of the extracted profile data and the site identifiers and resource identifiers in a user profile history stored in the memory (see paragraphs 130-131).

Blasko teaches comparing an actual profile vector with archived profile vectors and based upon a correlation rule (i.e. level of correspondence) said actual profile vector may be further modified by utilizing this type of correlation (see paragraph 150).

As per claim 18, Blasko teaches:

wherein the profile data extraction extracts metadata associated with the site identifier and the resource identifier in the extracted profile data (see paragraph 117).

As per claim 19, Blasko teaches:

identifying a user at a terminal identified by a computer identifier that generated the user activity data received by the server (i.e. MAC ID "identifier for the computer generating the profile vector"; see paragraph 52) by determining which one of at least two user profile histories, each of which is stored in the memory in association with a key, each key being associated with the computer identifier (i.e. "transaction ID") corresponds with the extracted profile data and selecting an advertising file for transmission to the terminal, the selected advertising file corresponding to the identified user (see paragraphs 20, 21, 87, 130).

As per claim 20, Blasko teaches:

wherein the comparison of site identifiers in the extracted profile data and the user profile histories stored in the memory compares cookies (see paragraphs 92, 96 and 148).

As per claim 21, <u>Blasko</u> teaches:

wherein the comparison of site identifiers in the extracted profile data and the user profile histories stored in the memory compares Internet Protocol (IP) addresses (i.e. identifier for the server generating the profile vector where in television would be the MAC ID for the STB; see paragraph 20" and in the Internet is the IP address of the user computer see paragraph 13).

As per claim 22, Blasko teaches:

wherein the profile data extraction extracts a subscriber identifier that identifies a subscriber site on a cable television network (see paragraph 52 "in television environment the transaction ID may be a MAC ID for the Set top box").

As per claim 23, Blasko teaches:

wherein the profile data extraction extracts a tuned channel identifier and metadata, the tuned channel identifier identifying a transmission channel to which a receiver is tuned at the identified subscriber site and the metadata identifies program content on the tuned channel (see paragraphs 104, 105, 121, 150).

As per claim 24, <u>Blasko</u> teaches:

identifying a user at the subscriber site identified by the subscriber identifier by determining which one of at least two user profile histories (see paragraph 52 "more than one transaction for the same user are observed and analyzed, the profile vectors are assigned a profile ID"), each of which is stored in the memory in association with a key (i.e. "profile ID"), each key being associated with the subscriber identifier for the subscriber site at which the user tuned the channel (see paragraph 45 "channel

selection"), corresponds with the extracted profile data (see paragraph 45) and selecting an advertising file for transmission to the subscriber site, the selected advertising file corresponding to the identified user (see paragraph 150).

Claims 1-12 are system claims which contains the same limitations as claims 13-24.

### Response to Arguments

4. Applicant's arguments filed 10/22/2007 have been fully considered but they are not persuasive. The Applicant argues with respect to the Section 112 2nd paragraph rejection, that one of ordinary skill in the art would know for example that the two sets of data may be processed by a hashing function to generate a key of the data. The Examiner answers that the Applicant is adding new matter to the Specification. Nowhere, in Applicant's specification is recited anything about "hashing".

The Applicant argues that <u>Blasko</u> does not compare extracted profile data to a stored profile to determine whether a new user identifier key should be generated and then used to stored a new generated profile history in association with a key for the terminal that sent the data from which the identifier key and the new generated user profile history was generated. The Examiner answers that <u>Blasko</u> teaches that each transaction (television viewing over predetermined period) is recognized by a profile ID (i.e. generated user identifier key; see paragraph 21) and the MAC-ID (i.e. key or identifier of the server generating the profile vector; see paragraph 20) of the set top box. The current profile vector generated with the profile ID is compared with previously stored profile vector to select suitable advertisements using collaborative filtering

10/008,259 Art Unit: 3622

techniques (see paragraph 21) and based on the identifying attributes in the profile Ids (i.e. transaction ID, transaction level, profiling content' see figure 3, paragraph 72), sets of profiles are linked or correlated (see paragraph 66). Therefore, contrary to Applicant's argument, in <u>Blasko</u>, if a generated profile vectors do not correlate to stored profile vectors by not correlating the profile ID attributes from said generated profile vectors to the stored profile vectors, <u>Blasko</u> generates a new profile vector, which is not merged with previously stored profile vectors.

The Applicant argues that <u>Blasko</u> does not teach the limitation that enable the feature of the ability to generate a user identifier key and a user profile history in response to key data corresponding to an existing key stored in memory, but the extracted profile history indicating it was generated by a user having different preferences enable the user profile generator to detect a new user at a device for which a user profile history has been previously stored and to identify the new user in a unique manner. The Examiner answers that <u>Blasko</u> teaches correlating an actual profile vector with a stored profile and if there is a correlation, <u>Blasko</u> modifies the profile vector to create an enhance profile (see paragraphs 150-151). <u>Blasko</u> teaches comparing the profile ID of stored profiles with actual profiles and merging or aggregating said profiles to generate an aggregate profile vector (See paragraph 158). Therefore, contrary to Applicant's argument, <u>Blasko</u> teaches Applicant's claimed invention.

The Applicant argues that <u>Blasko</u> does not teach generation of user identifier from key data obtained from extracted profile data and generation of a user profile history from extracted profile data in response to a determination that the key data

10/008,259 Art Unit: 3622

corresponds to stored key, but the extracted profile does not correspond to a user profile history stored in association with the key that correspond to key data. The Examiner answers that <u>Blasko</u> teaches comparing the profile ID of stored profiles with actual profiles and merging or aggregating said profiles to generate an aggregate profile vector (See paragraph 158). Therefore, contrary to Applicant's argument, <u>Blasko</u> teaches Applicant's claimed invention, as the profile vector that does not correlate would be assigned a new profile ID or transaction ID (see paragraph 21).

The Applicant argues with respect to claim 5 that <u>Blasko</u> comparison is based upon key comparison only and that there is no teaching, according to the Applicant, that <u>Blasko</u> compares profile histories themselves. The Applicant further argues that <u>Blasko</u> only generates a key and profile history when it cannot locate a key that corresponds to the key in the received messages The Examiner answers that <u>Blasko</u> teaches that based upon on identifying attributes in the profile Ids, sets of profiles are linked or correlated (see paragraph 67), where said attributes include transaction ID and profiling content (*i.e.* "web browsing activity data") (see paragraphs 72-73). Furthermore, <u>Blasko</u> teaches using profile histories information (i.e. demographic, psychographically derived from previous stored profiles in order to merge a profile with previously stored profile vectors (see paragraphs 150-154). Therefore, contrary to Applicant's argument, <u>Blasko</u> uses profile histories in order to compare generated profiles vectors to archived profiles vectors and when there is no correlation between the generated profile vector.

10/008,259 Art Unit: 3622

The Applicant argues with respect to claims 7 and 19 that Blasko does not teach a user identifier at a server site being used to determine a level of correspondence between extracted profile data and two profile histories stored in relationship to a single transaction identifier. The Applicant further argues that instead the system in Blasko only compares the keys and stores two separate profile histories under two separate transaction identifiers using personal information to generate the two separate keys. The Applicant argues that Blasko may give more weight to recent usage profile Data over less recent usage profile data so the selected advertisement correspond to a current user, but that is not, according to the Applicant, selection of an advertisement based upon determination that extracted profile data is more likely one profile history associated with a computer identifier than another profile history associated with the same computer identifier. The Examiners answers that Applicant's claims 7 and 19 simply recite at least two user profiles associated to a computer identifier and targeting an ad to a user profile. Blasko teaches associating a plurality of profile ID to a computer terminal (see paragraph 53) and targeting ads to one of said profile IDs (see paragraphs 61-62). Therefore, contrary to Applicant's argument, Blasko teaches Applicant's claimed invention.

The Applicant argues with respect to claims 12 and 24 that <u>Blasko</u> does not teach Applicant's claims because the system of <u>Blasko</u> according to the Applicant, is not able to generate a profile history for each user it detects using the same terminal and to associate each profile history with a single television terminal. Therefore, the Applicant argues that the user identifier of Applicant's invention is required capable of determining

10/008,259 Art Unit: 3622

which user is accessing the server through the television terminal. The Examiner answers that Applicant's claims 12 and 24 simply recite associating at least two user profile to a computer terminal and targeting an ad to said user profile. Blasko teaches associating a plurality of profile ID to a computer terminal (see paragraph 53) and targeting ads to one of said profile IDs (see paragraphs 61-62). Therefore, contrary to Applicant's argument, Blasko teaches Applicant's claimed invention.

The Applicant argues with respect to claim 13, that claim 13 requires that the generated user profile history is associated with both a user of a terminal and a key that corresponds to a terminal identifier. The Applicant argues that Blasko is unable to differentiate between different users without personal, private information being used as key or transaction identifier. The Applicant further argues that Blasko fails to teach multiple users of a single terminal may be grouped in a collection of profile vectors indexed with a single profile ID so different users of the terminal may be detected by comparing a current profile vector with a previously stored profile vector. The Examiner answers that Applicant's claim 13 simply discloses generating a new user profile from activity data if said activity data does not correlate with previously stored profile history data. Blasko teaches a current profile vector generated with the profile ID is compared with previously stored profile vector to select suitable advertisements using collaborative filtering techniques (see paragraph 21) and based on the identifying attributes in the profile Ids (i.e. transaction ID, transaction level, profiling content' see figure 3, paragraph 72), sets of profiles are linked or correlated (see paragraph 66). Therefore, contrary to Applicant's argument, in Blasko, if a created profile is not correlated with stored profile

vector by not correlating the actual profile vector attributes to the attributes of the stored profile vector, <u>Blasko</u> generates a new profile vector.

The Applicant argues with respect to claim 17 that <u>Blasko</u> does not teach Applicant's claim 17 because according to the Applicant, <u>Blasko</u> teaches that the correlation is based upon key comparison only. Please, see above paragraph for the Examiner answer for said argument.

The Applicant argues with respect to claim 20 that <u>Blasko</u> does not teach the comparison of regarding cookies in extracted profile data with cookies in stored profile data. The Examiner answers that <u>Blasko</u> teach in paragraph 96 the user "cookies" in order to generate a profile vector. Therefore, contrary to Applicant's argument, <u>Blasko</u> teaches the "cookies" limitation.

The Applicant argues with respect to claim 21 that <u>Blasko</u> does not teach the comparison of IP addresses. The Examiner answers that <u>Blasko</u> uses as transaction identifiers the identifier for the server generating the profile vector (i.e. where in television would be the MAC ID for the STB; see paragraph 20" and in the Internet would be the IP address of the user computer see paragraph 13). Therefore, contrary to Applicant's argument, <u>Blasko</u> teaches the IP address limitation.

#### Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

10/008,259 Art Unit: 3622

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 571-272-6720 and fax 571-273-6720. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W. STAMBER can be reached on 571-272-6724. The official Fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Daniel Lastra** 

December 31, 2007.